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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,900	04/21/2005	Denis Fauconnier	Q103120	8868

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EXAMINER	
CASCA, FRED A	

ART UNIT	PAPER NUMBER
2617	

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12/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/500,900	FAUCONNIER ET AL.	
	Examiner	Art Unit	
	FRED A. CASCA	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date ____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to applicant's amendment filed on August 25, 2008. Claims 1-39 are still pending in the present application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 1-9 and 14-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odenwalder et al (US 7167461 B2) in view of Akao (US 7123913 B2) and further in view of Kayama et al (US 2003/0017838 A1) and further in view of Wang et al (US 2002/0034158 A1).

Referring to claim 1, Odenwalder discloses a method of controlling communication channels between a base station and terminals, including channels that are shared by the terminals so as to communicate with said base station and at least one channel of the base station that is dedicated to one of the terminals (abstract and col. 4, lines 50-57, "a traffic channel to be shared"), the method comprising the following steps: allocating a list of shared channels, , to the base station (col. 1, lines 39-65, "cellular system", "FDMA", "TDMA", note a cellular system e.g., TDMA, FDMA, CDMA inherently comprises a set of contiguous cells where each cell has a base station, and each cell is assigned a set of frequencies (e.g., in FDMA and TDMA systems

adjacent cells would have different frequencies)) and at the base station level, selecting for the terminal one of the sets of shared channels (col. 1, lines 39-65).

Odenwalder does not specifically disclose indicating of a channel and/or frequency assigned to a base station in the format described by the applicant.

Akao discloses the concept of indicating the frequency assigned to a base station (col. 4, lines 4-20, "The frequency assignment indicates a frequency assigned to the destination base station").

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Odenwalder as claimed for the purpose of providing flexibility to the mobile terminal.

The combination of Odenwalder/Akao does not specifically disclose indicating the selected channel to the terminal by way of a dedicated channel as claimed by applicant.

Kayama discloses indicating selected channels to the terminal by way of a dedicated channel (paragraphs 46 and 65, "base station 1-1 directly notifies the mobile station of information about radio channels assigned by the selected radio base station").

It would have been obvious to one of the ordinary skills in the art at the time of invention to modify the method of Odenwalder/Akao for the purpose of providing a more efficient communication system.

The combination of Odenwalder/Akao/Kayama does not specifically disclose list is composed of several sets of shared channels.

Wang discloses several channel (frequency) subbands is allocated to a mobile terminal and also to a base station (Par. 03).

It would have been obvious to one of the ordinary skills in the art at the time of invention to modify the combination in the format claimed for the purpose of providing a more efficient communication system.

Referring to claim 2, the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed in claim 1, and further discloses the selection of one of the sets of shared channels for the terminal is made in response to a command for configuration of processing resources in the base station (Odenwalder, col. 1, lines 39-65, note that selection in response is inherent in cellular channel request and channel assignment).

Referring to claim 3, the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed in claim 2, and further disclose processing resources of the base station comprise several modules to which are assigned processings relating to groups of channels respectively associated with said modules, and in which each set of shared channels that is used by the base station is included in the group associated with one of the modules (Odenwalder, col. 1, lines 39-65, "cellular system", "FDMA", "TDMA", col. 4, lines 4-20).

Referring to claim 4, the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed in claim 3, and further discloses the set of shared channels that is indicated to the terminal is selected by the base station in such a way as to form part of the same group of channels, which is associated with one of the modules, as said dedicated channel (Odenwalder, col. 1, lines 39-65, "cellular system", "FDMA", "TDMA", col. 4, lines 4-20).

Referring to claim 5, the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed in claim 4, and further discloses the set of shared channels that is indicated to the terminal is selected by the base station in such a way as to form part of the same group of channels as each dedicated channel set up with said terminal (Odenwalder, col. 1, lines 39-65, "cellular system", "FDMA", "TDMA", col. 4, lines 4-20, Kayama, paragraphs 46 and 65).

Referring to claim 6, the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed in claim 1 and further disclose the list of shared channels that is allocated to the base station is composed of channels for signaling from the base station to the terminals (Odenwalder, col. 1, lines 39-65, "cellular system", "FDMA", "TDMA", col. 4, lines 4-20).

Referring to claim 7, the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed in claim 6, and further discloses shared channels furthermore comprise at least one channel for traffic from the base station to the terminals, and in which the shared signaling channels of the allocated list are intended to transmit information serving for the reception by the terminals of the traffic carried by the shared traffic channels (Odenwalder, col. 1, lines 39-65, "cellular system", "FDMA", "TDMA", col. 4, lines 4-20).

Referring to claim 8, the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed in claim 1 and further discloses selected set is indicated to the terminal in a redundant manner (Odenwalder, col. 1, lines 39-65).

Referring to claim 9, the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed in claim 1 and further discloses dedicated channel carries a stream of symbols destined for the terminal and in which said selected set is indicated to the terminal by modifying the value of at least one symbol of said stream (Odenwalder, col. 1, lines 39-65, "TDMA", note that streams of symbols are inherent in digital communications).

Referring to claim 15, the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed in claim 1 and further discloses the sets making up the list of shared channels that is allocated to the base station have the same number of channels (Odenwalder, col. 1, lines 39-65).

Referring to claim 16, the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed in claims 1, and further discloses some at least of the sets making up the list of shared channels that is allocated to the base station have numbers of channels that differ (Odenwalder, col. 1, lines 39-65).

Referring to claim 17, the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed in claim 1 and further discloses the sets making up the list of Shared channels that is allocated to the base station are disjoint (Odenwalder, col. 1, lines 39-65).

Referring to claim 18, the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed claim 1 and further discloses some at least of the sets making up

the list of shared channels that is allocated to the base station have channels in common (Odenwalder, col. 1, lines 39-65, "CDMA").

Referring to claim 14 the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed in claim 9.

The combo does not disclose the symbols whose value is modified are transmitted with a greater transmission power than the other symbols of the stream of symbols over said dedicated channel, as claimed.

I would have been an obvious design choice to transmit symbols with modified values with a greater transmission power, since the applicant has not mentioned any purpose for doing so.

Referring to claims 19 and 32, claims 19 and 32 define a mobile communication base station and terminal reciting features analogous to the features of the mobile communication method defined by claims 1 (as rejected above). Thus, the combination of Odenwalder/Akao/Kayama/Wang discloses all elements of claims 19 and 32 (please see the rejection of claim 1 above).

4. Claim 1-9 and 14-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odenwalder et al (US 7167461 B2) in view of Akao (US 7123913 B2) and further in view of Kayama et al (US 2003/0017838 A1) and still further in view of well known prior art (MPEP 2144.03) and further in view of Wang et al (US 2002/0034158 A1).

Referring to claims 10,11, and 12, the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed in claim 9.

The combo fails to specifically disclose the concepts of indicating periodically and the interleaving symbols in the format claimed by the applicant.

The applicant takes official notice of the fact that period processes and symbol interleaving are well known in the art.

It would have been obvious to one of the ordinary skills in the art at the time of invention to modify the combo as claimed for the purpose of providing a more efficient communication system.

Referring to claim 13, the combination of Odenwalder/Akao/Kayama/Wang discloses the method as claimed in claim 12, and further discloses information comprises an identifier of at least one of the shared channels of said selected set (Odenwalder, col. 1, lines 39-65, "CDMA").

Referring to claims 20-31 and 33-39, claims 20-31 and 33-39 define a base station and a mobile communication terminal reciting features analogous to the features of the mobile communication method defined by claims 1-18 (as rejected above). Thus, the combination of Odenwalder/Akao/Kayama/Wang and well known prior art discloses all elements of claims 20-31 and 33-39 (please see the rejection of claim 1-18 above).

Response to Arguments

5. Applicant's arguments with respect to claims 1-39 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Harper, can be reached at (571) 272-7605. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/VINCENT P. HARPER/

Supervisory Patent Examiner, Art Unit 2617